

Notice of Allowability

Application No.

09/862,514

Examiner

Le H Luu

Applicant(s)

ZEIDNER ET AL.

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed from 5/23/01 - 1/02/02.
2. ☒ The allowed claim(s) is/are 1-46.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 2004-10.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/31/01 - 1/08/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

LE HIEN LUU
PRIMARY EXAMINER

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

2. Pursuant to MPEP 606.01, the title has been changed to read:

-- A SYSTEM MAPS SCSI DEVICE WITH VIRTUAL LOGICAL UNIT
NUMBER AND MULTICAST ADDRESS FOR EFFICIENT DATA
REPLICATION OVER TCP/IP NETWORK --

3. The following is an Examiner's Statement of Reasons for Allowance:

Taylor et al., patent no. 6,654,830, teach configuring virtual devices and virtual circuits having logical address such as LUN number and target device identifier to a set of physical storage devices. User can input logical address to access storage resources. In addition, Taylor et al. teach carrying SCSI commands over TCP/IP communication links. However, the prior art of record fails to teach or suggest individually or in combination that a method of mirroring data transfer commands in a network, the network including a SCSI initiator and a plurality of SCSI targets being connected to a TCP/IP network, comprising the steps of: (a) transmitting, from the initiator, a registration command via the TCP/IP network, to each target of the plurality of targets, the registration command including a multicast address and a virtual logical

unit number; (b) establishing a mapping, responsive to the registration command, at each of the SCSI devices, indicating an association between the SCSI device and the virtual logical unit number and the multicast address; (c) transmitting, from the initiator, a SCSI data transfer command, the SCSI data transfer command indicating the multicast group address; (d) receiving, at each of the members of the multicast group, the data transfer command, and transferring data in response thereto; (e) executing, in each of the SCSI members of the multicast group, the specified data transfer command as set forth in claims 1, 15-16, 31-32, and 46. Claims 1-46 are allowed because of the combination of other limitations and the limitation listed above.

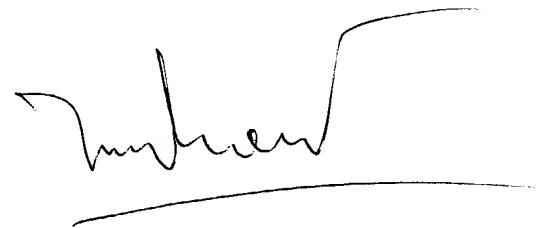
4. New corrected drawings are required in this application because some drawings are poor quality for publication. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H. Luu, whose telephone number is (703) 305-9650. The examiner can normally be reached Monday through Friday from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached at (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

A handwritten signature in black ink, appearing to read 'LH Luu', is written above a horizontal line.

LE HIEN LUU
PRIMARY EXAMINER

October 07, 2004